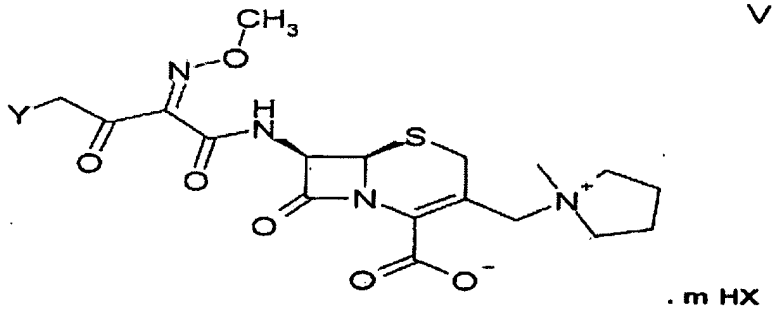
AMENDMENTS TO THE CLAIMS:

Claim 1 – 2. (Cancelled).

Claim 3 (Previously Presented). A process as claimed in claim 20, wherein pyrrolidinium-1-[(7-amino-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-yl)methyl]-iodide monohydrate is used.

Claim 4 (Previously Presented). A process as claimed in claim 20, wherein pyrrolidinium-1-[(7-amino-2-carboxy-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-yl)methyl]-chloride or pyrrolidinium-1-[(7-amino-2-carboxylato-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-yl)methyl]-dihydrochloride is used, optionally in ~~solvated~~ hydrated form.

Claim 5 (Previously Presented). A compound of formula V



wherein Y and X are Cl and wherein m=1.

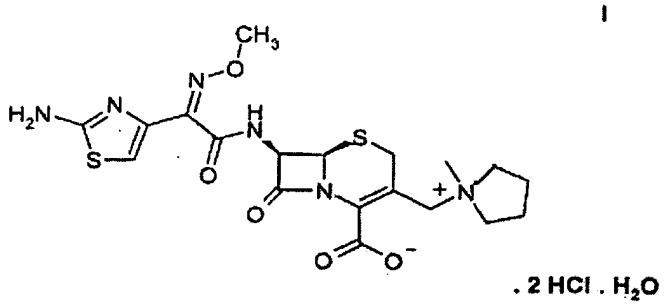
Claim 6 (Cancelled).

Claim 7 (Previously Presented). A compound as claimed in claim 5 having an X-ray powder diffraction pattern substantially as that shown in Figure 1.

Claim 8 (Previously Presented). A process according to claim 20, wherein 4-chloro-2-methoxyimino-3-oxo-butyryl chloride is used as the reactive derivative of formula III.

Claims 9 – 19 (Cancelled).

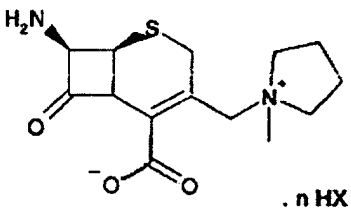
Claim 20 (Currently Amended). A process for producing a compound of formula I



I

. 2 HCl . H_2O

wherein a compound of formula IIA, or a hydrate of a compound of formula IIA,

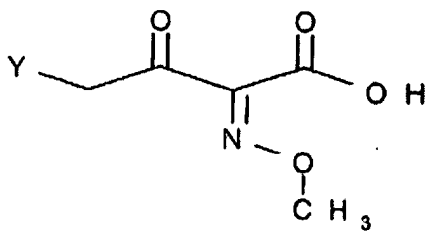


II A

. n HX

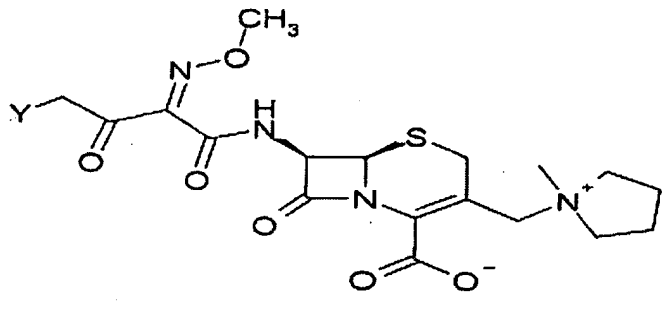
wherein n is 1 or 2 and X signifies chloride, bromide or iodide,

is reacted with a reactive derivative of formula III



III

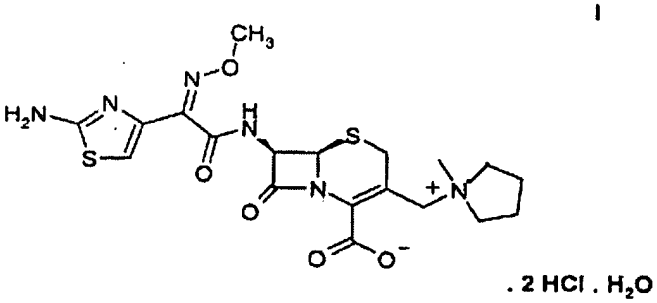
wherein Y signifies halogen, to form a compound of formula V



V

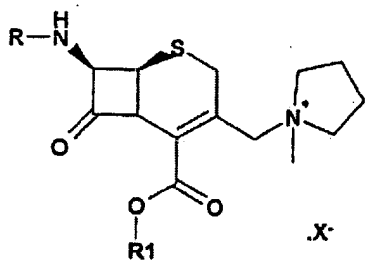
wherein m is 1 and wherein optionally the compound of formula V is isolated, wherein the compound of formula V is cyclised with thiourea in an aqueous or organic-aqueous medium, wherein ~~and~~ optionally ~~hydrochloric acid is added in an aqueous acetonic solution and~~ salt that is present is then removed, and wherein the compound of formula I is subsequently isolated from aqueous acetonic solution after addition of hydrochloric acid.

Claim 21 (Previously Presented). A process for producing a compound of formula I



I

wherein a compound of formula IIB



IIB

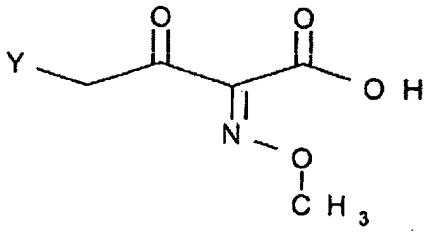
wherein

R_1 is a trialkylsilyl group,

R is hydrogen or a trialkylsilyl group, and

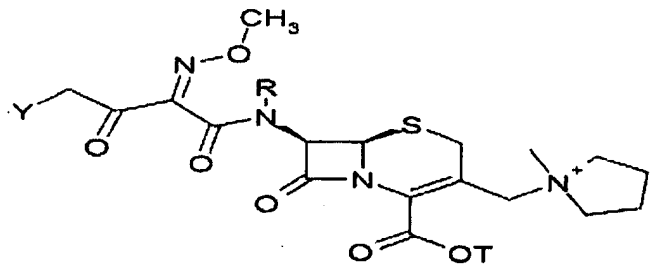
X signifies chloride, bromide or iodide

is reacted with a reactive derivative of formula III



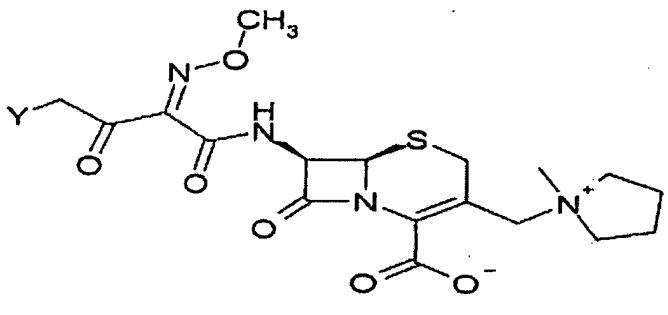
III

wherein Y signifies halogen, to form a compound of formula IV



IV

wherein T is trialkylsilyl, the silyl protecting group is removed to form a compound of the formula V, ~~and wherein the compound of formula V~~, wherein m is 1, ~~is cyclized,~~



V

. m HX

wherein optionally ~~after~~ the compound of formula V ~~has been~~ is isolated, and wherein the compound of formula V is cyclized with thiourea in an aqueous or organic-aqueous medium and wherein optionally ~~hydrochloric acid is added in an aqueous acetonic solution and~~ salt that is present is then removed, and wherein the compound of formula I is subsequently isolated from aqueous acetonic solution after addition of hydrochloric acid.